Office of Public and Indian Housing
Operating Fund Interim Formula
How to Use the Interim Formula Calculator

HOW TO USE THE
INTERIM FORMULA CALCULATOR

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Introduction

Introduction

The **How to Use the Interim Formula Calculator** guide should be used in conjunction with the Interim Formula Calculator for step by step instructions on using the Calculator as a Public Housing Operating Fund budget planning tool. The guide is divided into several chapters, each associated with a particular worksheet of the Interim Formula Calculator.

The **How to Use the Interim formula Calculator** guide instructs the user on how to open the Interim Formula Calculator, how to view a welcome worksheet, how to select a specific HA Code and Project Number, how to calculate estimated operating subsidy, how to calculate utility adjustments, how to view a subsidy summary, and how to view a list of troubleshooting points. The guide also includes screenprints of what will be viewed on the computer screen as the user follows the steps in the guide.

For questions regarding the **How to Use the Interim Formula Calculator** guide, or the Interim Formula Calculator, please contact the Funding and Financial Management Division in the Office of Public and Indian Housing, at the Department of Housing and Urban Development.

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**Opening the Interim
Formula Calculator**

Opening the Interim Formula Calculator

1. Open the Interim Formula Calculator file,
   a:\InterimFormulaCalculator.xls.

2. To keep the *a:\InterimFormulaCalculator.xls* file as a blank copy of
   the Interim Formula Calculator, you must save it as a different filename
   for use in running your individual PHA calculation. To save it as a
   different file name, go to the File menu, select Save As.

3. Save the new file in the following format to the drive you prefer to run
   your individual PHA calculation:
   OpSub_HA Code + project number + four digit number of the current
   Federal Fiscal Year
   i.e. OpSub_AL0010012000

   For example, the file name *OpSub_AL0010012000* would represent
   the calculation of the operating subsidy for the Public Housing
   Authority AL001, project 001 for the Federal Fiscal Year 2000. The
   extension *.xls* is automatically attached to the Excel file.

4. For future access of the blank file, open
   a:\InterimFormulaCalculator.xls.

5. For future access of the file completed for your specific PHA, open the
   file titled OpSub_ HA Code + project number + four digit number of
   the current Federal Fiscal Year (OpSub_*AL0010012000.xls* per the
   example above.)

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**Viewing the
Welcome Worksheet**

Viewing the Welcome Worksheet

1. Upon opening the Interim Formula Calculator, the worksheet entitled **Welcome** appears:

Welcome to the Interim Formula Calculator!

The Interim Formula Calculator is designed to be used as an Operating Fund budget planning tool. Public Housing Authorities can use this tool to estimate what their Operating Subsidy would be under different scenarios by changing the data that are entered into the Calculator (i.e., raising or lowering the occupancy rate, income levels, etc.)

The Interim Formula Calculator is composed of five worksheets:

HA Selection: Allows a Public Housing Authority to select its HA Code and Project Number, and displays its HA Name.
Subsidy Calculator: Modeled after form HUD-52723 to calculate estimated Operating Fund subsidy eligibility.
Utility Helper: Provides a shell of forms HUD-52722-A and HUD-52722-B to calculate an estimated Utility Adjustment.
Subsidy Summary: Displays the bottom line estimated Operating Fund subsidy broken down by the main formula elements.
Troubleshooting: Provides a list of helpful hints and troubleshooting points for guidance while using the Interim Formula Calculator. To access **Troubleshooting** at any time while using the Interim Formula Calculator, click the ❓ button located in the top right-hand corner of every worksheet.

There is a red square ■ directly to the right of most Line Items in the Interim Formula Calculator. Running the cursor over this red square displays a detailed description of the Line Item.

Go to   **HA Selection**   worksheet.

2. The **Welcome** worksheet provides an overview of the objectives of the Interim Formula Calculator and its contents. The **Welcome** worksheet also instructs the user to click on the **?** button to access the **Troubleshooting** worksheet. Please refer to the section entitled **Using the Troubleshooting Worksheet** on page 13 of this guide for an explanation of the **Troubleshooting** worksheet.

3. After viewing the **Welcome** worksheet, click on the **HA Selection** button.

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**Selecting an
HA Code and
Project Number**

Selecting an HA Code and Project Number

1. After clicking the [**HA Selection**] button on the **Welcome** worksheet, the **HA Selection** worksheet appears:

2. Click on the [▼] button to scroll through the list of HA Codes and Project Numbers.

3. Select the desired **HA Code** and **Project Number** by clicking on it once.

4. The **HA Name** corresponding to the selected **HA Code** and **Project Number** is displayed.

5. Click on the [BEGIN CALCULATOR] button.

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**Completing the
Interim Formula
Calculator**

Completing the Interim Formula Calculator

1. After clicking on the [BEGIN CALCULATOR] button on the **HA Selection** worksheet, the **Subsidy Calculator** worksheet appears:

   The picture below is only a portion of the actual worksheet.

   Interim Formula Calculator
   Subsidy Calculator

   [RETURN] *to HA Selection worksheet.* [?]

HA Code and Project Number:	AL001001
HA Name:	BIRMINGHAM HA
Number of Units:	
Unit Months Available:	

   PLEASE NOTE: The following Line Items do not necessarily correspond to line numbers on HUD forms.

   Part A. Allowable Expenses and Additions: **PUM**

   Line Item
1.	Allowable Expense Level (AEL)	$246.01
2a.	Line Item 1 multiplied by .005	$1.23
2b.	Delta from form HUD-52720-B, if applicable (Line 2b, form HUD-52723)	
3.	Flood Insurance Premiums (Line 27, form HUD-52723-make sure to convert to PUM)	

2. Enter the **Number of Units** and **Unit Months Available** directly under the **HA Name** field at the top of the **Subsidy Calculator** worksheet.

   HINT: To advance to the next data entry cell, press **Enter** on your keyboard, use the arrow keys, or click once in the desired cell using your mouse. **DO NOT PRESS** the **Tab** button on your keyboard.

3. Enter data into **Part A. Allowable Expenses and Additions**. Lines 2b, 3, 5, 6a, 6b, 7, and 8 require data entry. Lines 1 and 2a have been previously populated, please do not attempt to alter the contents of these cells. Lines 4, 6, and 9 are automatically calculated using entered data.

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4. Enter data into **Part B. Allowable Utilities Expense Level**.
    Line 10 requires data entry.

5. Enter data into **Part C. Dwelling Rental Income**. Lines 11a
    (two blank fields), 11b, 12a, 12b, and 15 require data entry. Line
    14 has been previously populated, please do not attempt to alter the
    contents of this cell. Lines 11c, 12c, 12d, 13, and 16 are
    automatically calculated using entered data. **The date for Line
    11a (the first blank field) should be entered in the following
    format: MM/DD/YYYY.**

6. Enter data into **Part D. Other Income (new definition)**. Lines 17
    and 18 require data entry. Lines 19 and 20 are automatically calculated
    using entered data.

7. Review **Part E. Operating Subsidy before Resident
    Participation and Other Add-ons**. Line 21 is automatically
    calculated using entered data.

8. Enter data into **Part F. Resident Participation and Other Add-
    ons for Changes in Federal Law or Regulation and Other
    Eligibility**. Lines 22b, 23, 24, and 25a-g require data entry. Line 22a
    has previously been populated, please do not attempt to alter the
    contents of this cell. Lines 22, 22c, 25, and 26 are automatically
    calculated using entered data. Line 22 equals Line 22c multiplied by
    $25.

9. Complete **Part G. Calculation of Operating Subsidy
    Eligibility**. Lines 27, 28, 29, 30, and 32 are automatically calculated
    using entered data. To calculate **Line 31. Utility Adjustment**, select
    the [*HERE*] button to display the **Utility Helper** worksheet. Please
    refer to the section entitled **Completing the Utility Helper** on page 8 of
    this guide for further instructions on how to use the **Utility Helper**
    worksheet. Line 31 on the **Subsidy Calculator** worksheet is
    automatically populated after completing the **Utility Helper** worksheet.

30.	*Operating Fund Subsidy Eligibility before Utility Adjustment	#DIV/0!
Please click [*HERE*] to use the Utility Helper worksheet to calculate Line 31. Utility Adjustment.		
31.	*Utility Adjustment	#DIV/0!

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10. After completing the **Subsidy Calculator** worksheet, click the ⬚HERE⬚
     button at the bottom of the worksheet as shown below. The **Subsidy
     Summary** worksheet is displayed. Please refer to the section entitled
     Reviewing the Subsidy Summary on page 12 of this guide for an
     explanation of the **Subsidy Summary** worksheet.

     Click ⬚HERE⬚ to see Subsidy Summary worksheet.

     NOTE: If the message below is displayed after completing the **Subsidy
               Calculator** worksheet, make sure that all cells that require data entry
               have been filled.

     One or more cells that require data entry are still blank. Please review your calculator entries.

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**Completing the
Utility Helper**

Completing the Utility Helper

1. After selecting the $\boxed{\textit{HERE}}$ button in **Part G. Calculation of Operating Subsidy Eligibility** of the **Subsidy Calculator** worksheet, the worksheet entitled **Utility Helper** will appear, containing an electronic version of forms *HUD-52722-A Calculation of Allowable Utilities Expense Level* and *HUD-52722-B Adjustment for Utility Consumption and Rates*:

   The below picture is only a portion of the actual worksheet.

Interim Formula Calculator
Utility Helper

HA Code and Project Number:	AL001001
HA Name:	BIRMINGHAM HA

Calculation of Allowable Utilities Expense Level (*from form HUD-52722-A*)
NOTE: Use data from form HUD-52722-A for the year which is two years prior to the Interim Formula Calculator year (i.e., if completing the Interim Formula Calculator for PHA fiscal year ending June 30, 2002, use data from form HUD-52722-A from PHA fiscal year ending June 30, 2000).

If your PHA has flat rates for a utility, please refer to the "Completing the Utility Helper" section in the "How to Use the Interim Formula Calculator" guide.

	Unit Months Available	Sewerage and Water Consumption	Electricity Consumption	Gas Consumption	Fuel Consumptio Type:	Ty
Line 01						
Line 02						
Line 03						

Calculation of Allowable Utilities Expense Level (from form HUD-52722-A)

2. Use data from form HUD-52722-A for the year which is two years prior to the Interim Formula Calculator year (i.e., if completing the Interim Formula Calculator for PHA fiscal year ending June 30, 2002, use data from form HUD-52722-A from PHA fiscal year ending June 30, 2000).

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3. Enter data into the table **Calculation of Allowable Utilities Expense Level** *(from form HUD-52722-A)*. Lines 01, 02, 03, 05, 08, 10, and 12a require data entry for all columns (unless the individual cell is already populated, or grayed out). Lines 04, 06, 07, 09, 11, and 12 are automatically calculated using entered data. Line 12b allows the user to select the **Unit of Consumption** by using a drop-down list box as shown below. If *Other* is selected as the **Unit of Consumption**, type the actual Unit of Consumption in the cell below the drop-down list box.

| Line 12b | | tons | ▼ | kilowatt hour | ▼ | cubic feet | ▼ | gallons | ▼ | gallons |
| *Other:* | | | | | | | | | | |

4. *****PHAs with flat rates for a utility*****
   Some PHAs have flat rates for utility costs and require special data entry instructions for flat rates. If a utility type (i.e. Sewerage and Water Consumption) has flat rates, enter data for flat rates into the table **Calculation of Allowable Utilities Expense Level** *(from form HUD-52722-A)* using the following steps. If your PHA does not have flat rates, continue to step 5.

   • For all consumption types that have flat rates (most typically, Sewerage and Water Consumption) in the table **Calculation of Allowable Utilities Expense Level** *(from form HUD-52722-A)*:

   a. Enter a "1" in the **Consumption** column for Line 01;
   b. Enter a "1" in the **Consumption** column for Line 02;
   c. Enter a "1" in the **Consumption** column for Line 03;
   d. Enter a "0" in the **Consumption** column for Line 08;
   e. Enter the estimated flat rate cost in the **Consumption** column for Line 10;
   f. Enter a "1" in the **Consumption** column for Line 12a; and
   g. Select "flat rate" from the drop-down list box in Line 12b in the **Consumption** column for all consumption types that have flat rates (e.g. Sewerage and Water Consumption).

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Adjustment for Utility Consumption and Rates (from form HUD-52722-B)

5. Use data from form HUD-52722-B for the year which is two years prior to the Interim Formula Calculator year (i.e., if completing the Interim Formula Calculator for PHA fiscal year ending June 30, 2002, use data from form HUD-52722-B from PHA fiscal year ending June 30, 2000).

6. Enter data into the table **Adjustment for Utility Consumption and Rates** *(from form HUD-52722-B)*. Lines 13 and 14 (except for the **Totals** column), and 23 require data entry. Lines 13 (**Totals** column), 15, 16, 17, 18, 19, 20, 21, 22, and 24 are automatically calculated using entered data.

7. *****PHAs with flat rates for a utility*****
    Some PHAs have flat rates for utility costs and require special data entry instructions for flat rates. If a utility type (i.e. Sewerage and Water Cost and Consumption) has flat rates, enter data for flat rates into the table **Adjustment for Utility Consumption and Rates** *(from form HUD-52722-B)* using the following steps. If your PHA does not have flat rates, continue to step 8.

    *   For all consumption types that have flat rates (most typically, Sewerage and Water Cost and Consumption) in the table **Adjustment for Utility Consumption and Rates** *(from form HUD-52722-B):*

        a. Enter the actual utility cost for the fiscal year for which the adjustment is requested in the **Cost and Consumption** column for Line 13.
        b. Enter a "1" in the **Cost and Consumption** column for Line 14.

NOTE: On forms *HUD-52722-A* and *HUD-52722-B*, the user may specify the type of **Fuel Consumption** by manually typing that information in the space below **Type:** in each corresponding column as shown below.

Fuel Consumption (Specify type e.g., oil, coal, wood)			
Type:	Type:	Type:	Type:

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8. After completing the **Utility Helper** worksheet, click the HERE button at the bottom of the worksheet as shown below. The **Subsidy Calculator** worksheet is displayed and Line 31 is populated with Line 24 from the table **Adjustment for Utility Consumption and Rates** (*from form HUD-52722-B*).

After completion of the above forms, click HERE *to return to Subsidy Calculator worksheet.*

*Remember to return to page 7, number 10 of the *How to Use the Interim Formula Calculator* guide to complete the remainder of the Subsidy Calculator worksheet.

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**Reviewing the
Subsidy Summary**

Reviewing the Subsidy Summary

1. After clicking the **HERE** button at the bottom of the **Subsidy Calculator** worksheet, the **Subsidy Summary** worksheet appears:

   The below picture is only a portion of the actual worksheet.

   Interim Formula Calculator
   Subsidy Summary

HA Code and Project Number:	AL001001
HA Name:	BIRMINGHAM HA

   ?

	PUM	Whole Dollars
Total Allowable Expenses and Additions	$0.00	
Allowable Utilities Expense Level +	$0.00	
Total Operating Receipts -	#DIV/0!	
Total Operating Subsidy before Resident Participation & Other Add-ons	#DIV/0! * 0 =	*#DIV/0!*
Total Resident Participation +		$0.00
Other Add-ons +		$0.00
Operating Fund Subsidy Eligibility before Utility Adjustment		*#DIV/0!*
Utility Adjustment		#DIV/0!

2. After reviewing the **Subsidy Summary** worksheet, click the **RETURN** button to return to the **Subsidy Calculator** worksheet.

NOTE: No data entry is required for the **Subsidy Summary** worksheet. All values are recorded from the **Subsidy Calculator** worksheet.

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**Using the
Troubleshooting
Worksheet**

Using the Troubleshooting Worksheet

1. To access the **Troubleshooting** worksheet while using any

   worksheet of the Interim Formula Calculator, click the **?**
   button in the top right-hand corner:

   The picture below is only a portion of the actual worksheet.

   Interim Formula Calculator
   Troubleshooting

   For specific instructions on how to use the Interim Formula Calculator, please refer to the "How to Use the Interim Formula Calculator" guide.

   Automatically Calculated Line Items
   Several of the automatically calculated line items display **#DIV/0!** before related data has been entered into the cells that are used in the calculation. If any cells still display **#DIV/0!** after completing the worksheet, make sure that no cells on the worksheet are still blank.

   ■**Red Squares**
   There is a red square ■ directly to the right of most Line Item numbers (as well as in the upper right-hand corner of the fields on the **Utility Helper** worksheet) in the Interim Formula Calculator. Running the cursor over this red square displays a detailed description of the Line Item. In most cases, these descriptions are the same as those found on forms *HUD-52723, HUD-52722-A, HUD-52722-B,* and *HUD-52599*.

   Locked Cell Warning
   When attempting to enter data into automatically calculated fields, fields which contain data when the calculator is first opened, or fields other than those meant to contain data, the following message appears:
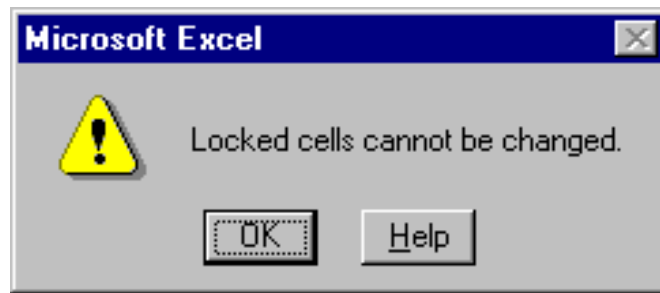
2. Below is the list of Troubleshooting points on the **Troubleshooting**
   worksheet:

   - **Automatically Calculated Line Items**
     Several of the automatically calculated line items display **#DIV/0!**
     before related data has been entered into the cells that are used in the
     calculation. If any cells still display **#DIV/0!** after completing the
     worksheet, make sure that no cells on the worksheet are blank.

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- **Red Squares**

  There is a red square   directly to the right of most Line Item numbers (as well as in the upper right-hand corner of the fields on the **Utility Helper** worksheet) in the Interim Formula Calculator. Running the cursor over this red square displays a detailed description of the Line Item. In most cases, these descriptions are the same as those found on forms *HUD-52723, HUD-52722-A, HUD-52722-B*, and *HUD-52599*.

- **Locked Cell Warning**

  When attempting to enter data into automatically calculated fields, fields which contain data when the calculator is first opened, or fields other than those meant to contain data, the following message appears:

  To continue entering data in an appropriate cell, click the **OK** button on the warning message to return to the current Interim Formula Calculator worksheet.

  (This warning will show a different message if using a higher   version of Microsoft Excel, i.e., higher than Microsoft Excel for   Windows 95 Version 7.0a.)

- **Grayed Out Cells**

  Grayed out cells signify that the user should not enter data into these cells.

3. After viewing the **Troubleshooting** worksheet, press the   **Return to Previous Worksheet**   button to return to the previous worksheet. This button is located at the bottom of the **Troubleshooting** worksheet.

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